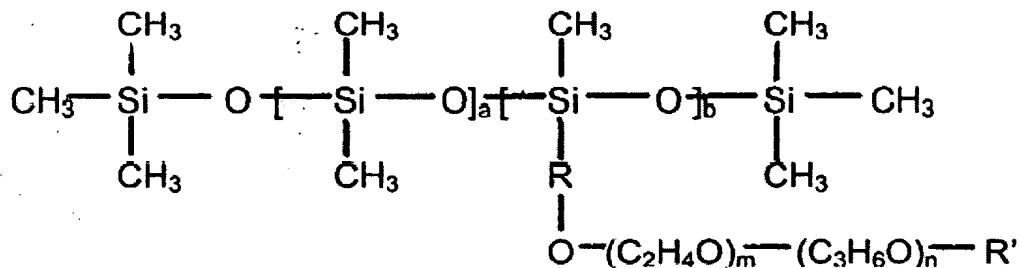


WHAT IS CLAIMED IS:

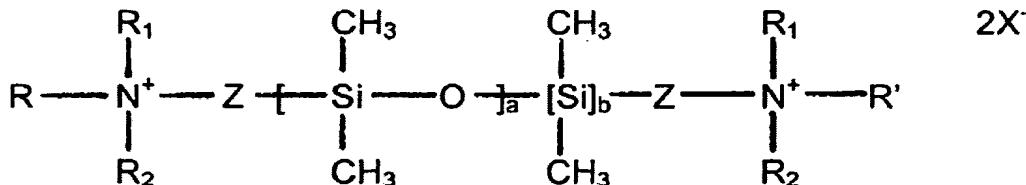
1. A soft paper-based product comprising a cellulosic fibrous material, wherein an aqueous-based softening composition is incorporated into the paper-based product at an add-on level of between about 0.1% to about 10% by weight of the paper-based product, said softening composition comprising a silicone glycol in an amount between about 0.01% to about 20% by weight of said softening composition, a silicone quaternary ammonium compound in an amount between about 0.01% to about 20% by weight of said softening composition, an emollient in an amount between about 0.01% to about 20% by weight of said softening composition, and water in an amount greater than about 40% by weight of said softening composition.

2. The product of claim 1, wherein said silicone glycol has the general formula:



15 wherein a ≥ 1 and b ≥ 1 ;
 wherein R is selected from C₁ – C₆ alkyls and C₁ – C₆ hydroxyalkyls;
 wherein R' is selected from hydrogen, C₁ – C₆ alkyls, C₁ – C₆ hydroxyalkyls, C₁ – C₆ acyls, and C₁ – C₆ acetates;
 wherein m is between about 1 to about 500; and
 20 wherein n is between about 1 to about 300.

3. The product of claim 1, wherein said silicone quaternary ammonium compound has the general formula:



25 wherein a ≥ 1 and b ≥ 1 ;

wherein R₁ is selected from C₁ – C₆ alkyls and C₁ – C₆ hydroxyalkyls;
wherein R₂ is selected from C₁ – C₆ alkyls and C₁ – C₆ hydroxyalkyls;
wherein R is selected from C₈ – C₂₄ aliphatic hydrocarbons;
wherein R' is selected from C₈ – C₂₄ aliphatic hydrocarbons;

5 wherein Z is selected from the group consisting of: —(CH₂)_j—CHOH—CH₂—O—(CH₂)_k—, wherein j ≥ 1 and k ≥ 1; CH₂—CH₂—CH₂—O—(CH₂)₃—; alkyls; and alkyl esters; and
wherein X is an ion.

4. The product of claim 1, wherein said water comprises greater than
10 about 75% by weight of said softening composition.

5. The product of claim 1, wherein said emollient comprises between
about 0.01% to about 10% by weight of said softening composition.

6. The product of claim 1, wherein said emollient includes a linear
primary alkyl ester of benzoic acid.

15 7. The product of claim 6, wherein said linear primary alkyl ester of
benzoic acid is C₁₂-C₁₅ alkyl benzoate.

8. The product of claim 1, wherein said softening composition further
comprises a fatty alcohol in an amount between about 0.01% to about 20% by
weight of said softening composition.

20 9. The product of claim 8, wherein said fatty alcohol is selected from the
group consisting of cetyl alcohol, stearyl alcohol, cetearyl alcohol, arachidyl
alcohol, behenyl alcohol, and combinations thereof.

10. The product of claim 1, wherein said softening composition further
comprises an emulsifier in an amount between about 0.01% to about 20% by
25 weight of said softening composition.

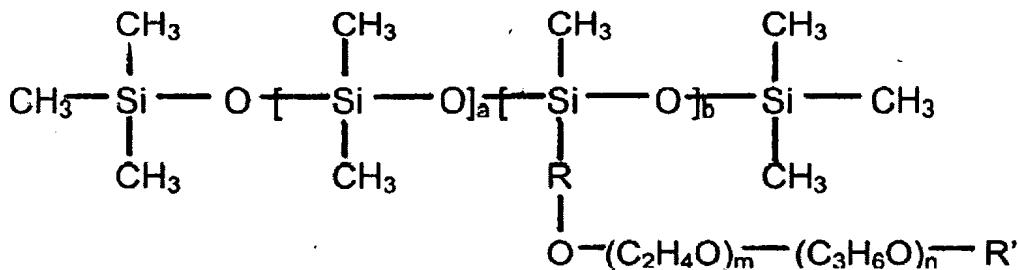
11. The product of claim 10, wherein said emulsifier includes a
polyoxyethylene stearyl ether.

12. The product of claim 1, wherein said softening composition further
comprises a skin conditioning agent in an amount between about 0.01% to about
30 20% by weight of said softening composition.

13. The product of claim 12, wherein said skin conditioning agent
includes a humectant.

14. The product of claim 13, wherein said humectant includes glycerin.

15. The product of claim 1, wherein said add-on level of said softening composition is between about 0.5% to about 10% by weight of said paper-based product.
16. The product of claim 1, wherein said softening composition further 5 comprises an antimicrobial agent, a preservative, or combinations thereof.
17. The product of claim 1, wherein said paper-based product has a basis weight between about 10 to about 200 grams per square meter.
18. The product of claim 1, wherein said paper-based product has a basis weight between about 15 to about 100 grams per square meter.
- 10 19. A method for forming a soft paper product comprising:
forming a web from at least one furnish containing cellulosic fibrous material
and water; and
treating said web with an aqueous-based softening composition such that
the add-on level of said softening composition is between about 0.1% to about 10%
15 of said paper product,
wherein said softening composition comprises a silicone glycol in an amount
between about 0.01% to about 20% by weight of said softening composition, a
silicone quaternary ammonium compound in an amount between about 0.01% to
about 20% by weight of said softening composition, an emollient in an amount
20 between about 0.01% to about 20% by weight of said softening composition, and
water in an amount greater than about 40% by weight of said softening
composition.
20. The method of claim 19, further comprising drying said web.
21. The method of claim 20, wherein said web is through-dried.
- 25 22. The method of claim 20, wherein said web is treated with said
softening composition after said web is dried.
23. The method of claim 19, further comprising creping said web.
24. The method of claim 19, wherein said silicone glycol has the general
formula:



wherein $a \geq 1$ and $b \geq 1$;

wherein R is selected from C₁ – C₆ alkyls and C₁ – C₆ hydroxyalkyls;

wherein R' is selected from hydrogen, C₁ – C₆ alkyls, C₁ – C₆ hydroxyalkyls,

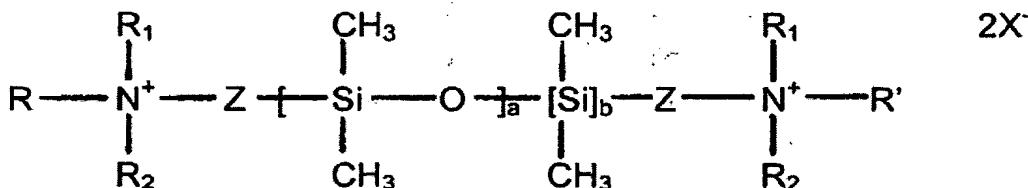
5 C₁ – C₆ acyls, and C₁ – C₆ acetates;

wherein m is between about 1 to about 500; and

wherein n is between about 1 to about 300.

25. The method of claim 19, wherein said silicone quaternary ammonium compound has the general formula:

10



wherein $a \geq 1$ and $b \geq 1$;

wherein R₁ is selected from C₁ – C₆ alkyls and C₁ – C₆ hydroxyalkyls;

15 wherein R₂ is selected from C₁ – C₆ alkyls and C₁ – C₆ hydroxyalkyls;

wherein R is selected from C₈ – C₂₄ aliphatic hydrocarbons;

wherein R' is selected from C₈ – C₂₄ aliphatic hydrocarbons;

wherein Z is selected from the group consisting of: $-(\text{CH}_2)_j-\text{CHOH}-$

$\text{CH}_2-\text{O}-(\text{CH}_2)_k-$, wherein j ≥ 1 and k ≥ 1 ; $\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{O}-(\text{CH}_2)_3-$; alkyls;

20 and alkyl esters; and

wherein X is an ion.

26. The method of claim 19, wherein said water comprises greater than about 75% by weight of said softening composition.

27. The method of claim 19, wherein said emollient comprises between

25 about 0.01% to about 10% by weight of said softening composition.

28. The method of claim 19, wherein said emollient includes a linear primary alkyl ester of benzoic acid.

29. The method of claim 28, wherein said linear primary alkyl ester of benzoic acid is C₁₂-C₁₅ alkyl benzoate.

5 30. The method of claim 19, wherein said add-on level of said softening composition is between about 0.5% to about 10% by weight of said paper product.

31. The method of claim 19, wherein said paper product has a basis weight between about 10 to about 200 grams per square meter.

10 32. The method of claim 19, wherein said paper product has a basis weight between about 15 to about 100 grams per square meter.

33. An aqueous-based softening composition comprising:

a silicone glycol in an amount between about 0.01% to about 20% by weight of said softening composition;

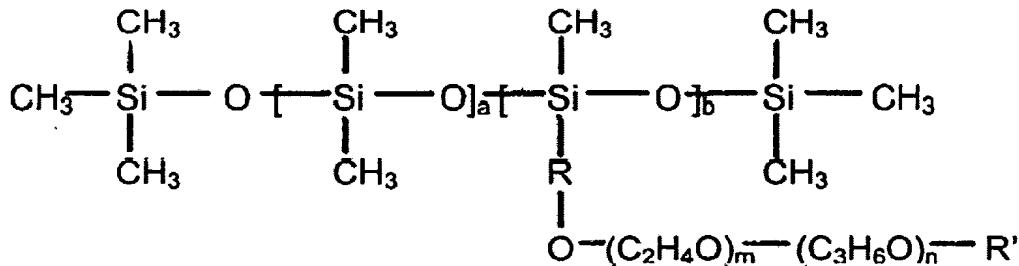
a silicone quaternary ammonium compound in an amount between about

15 0.01% to about 20% by weight of said softening composition;

an emollient in an amount between about 0.01% to about 20% by weight of said softening composition; and

water in an amount greater than about 40% by weight of said softening composition.

20 34. The softening composition of claim 33, wherein said silicone glycol has the general formula:



wherein a ≥ 1 and b ≥ 1;

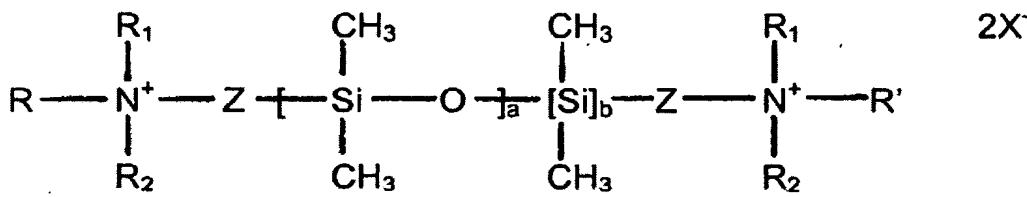
wherein R is selected from C₁ – C₆ alkyls and C₁ – C₆ hydroxyalkyls;

25 wherein R' is selected from hydrogen, C₁ – C₆ alkyls, C₁ – C₆ hydroxyalkyls, C₁ – C₆ acyls, and C₁ – C₆ acetates;

wherein m is between about 1 to about 500; and

wherein n is between about 1 to about 300.

35. The softening composition of claim 33, wherein said silicone quaternary ammonium compound has the general formula:



5

wherein $a \geq 1$ and $b \geq 1$;

wherein R_1 is selected from $\text{C}_1 - \text{C}_6$ alkyls and $\text{C}_1 - \text{C}_6$ hydroxyalkyls;

wherein R_2 is selected from $\text{C}_1 - \text{C}_6$ alkyls and $\text{C}_1 - \text{C}_6$ hydroxyalkyls;

wherein R is selected from $\text{C}_8 - \text{C}_{24}$ aliphatic hydrocarbons;

10 wherein R' is selected from $\text{C}_8 - \text{C}_{24}$ aliphatic hydrocarbons;

wherein Z is selected from the group consisting of: $-(\text{CH}_2)_j-\text{CHOH}-$

$\text{CH}_2-\text{O}-(\text{CH}_2)_k-$, wherein $j \geq 1$ and $k \geq 1$; $\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{O}-(\text{CH}_2)_3-$; alkyls; and alkyl esters; and

wherein X is an ion.

15 36. The softening composition of claim 33, wherein said water comprises greater than about 75% by weight of said softening composition.

37. The softening composition of claim 33, wherein said emollient comprises between about 0.01% to about 10% by weight of said softening composition.

20 38. The softening composition of claim 33, wherein said emollient includes a linear primary alkyl ester of benzoic acid.

39. The softening composition of claim 38, wherein said linear primary alkyl ester of benzoic acid is $\text{C}_{12}-\text{C}_{15}$ alkyl benzoate.

25 40. The softening composition of claim 33, further comprising a fatty alcohol in an amount between about 0.01% to about 20% by weight of said softening composition.

41. The softening composition of claim 40, wherein said fatty alcohol is selected from the group consisting of cetyl alcohol, stearyl alcohol, cetearyl alcohol, arachidyl alcohol, behenyl alcohol, and combinations thereof.

30 42. The softening composition of claim 33, wherein said softening composition is an oil-in-water emulsion.

43. The softening composition of claim 33, further comprising an emulsifier in an amount between about 0.01% to about 20% by weight of said softening composition.

44. The softening composition of claim 43, wherein said emulsifier
5 includes a polyoxyethylene stearyl ether.

45. The softening composition of claim 33, further comprising a skin conditioning agent in an amount between about 0.01% to about 20% by weight of said softening composition.

46. The softening composition of claim 45, wherein said skin conditioning
10 agent includes a humectant.

47. The softening composition of claim 46, wherein said humectant includes glycerin.

48. The softening composition of claim 33, further comprising an
15 antimicrobial agent, a preservative, or combinations thereof.